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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,095	03/12/2001	Koji Asahi	69099/2000	6456

466 7590 04/17/2003

YOUNG & THOMPSON
745 SOUTH 23RD STREET 2ND FLOOR
ARLINGTON, VA 22202

EXAMINER

SONG, SARAH U

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 04/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/803,095	Applicant(s) ASAHI, KOJI	
	Examiner Sarah Song	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2,4</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The prior art documents submitted by the applicant in the Information Disclosure Statement filed on March 12, 2001 and November 6, 2002 have all been considered and made of record (note the attached copy of form PTO-1449).

Drawings

3. Figure 33 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

5. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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6. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. For purposes of examination, the claims will be interpreted in light of the specification and the figures.

Claim Objections

7. Applicant is advised that should claim 20 be found allowable, claim 24 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 3, 4, 7-10, 15 and 17-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Asahi (JP 2000-069510 provided by the applicant). Asahi discloses an optical cross connect apparatus comprising a light switch 309 having n first ports and at least n first ports (e.g. input ports 1-1 and 1-2) and at least n+1 second ports (e.g. output ports 6-1, 6-2..6-n), a light path control section (Figure 5); and a light signal supervising section 319. It is noted that switch 309 switches paths of light from any of the first ports to any of the second ports (paragraph [0029]). Figures 30 and 32 illustrate the state in which light is coupled from one

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input port to one output port, when supervising of the light signal is not effected. Furthermore, Figure 31 illustrates the state in which light is branched from an input port to two output ports when supervising of the light signal is effected. Regarding claim 4, Asahi discloses a wavelength separating section 302, a wavelength component converting section 310 (see paragraphs [0073], [0085], [0087]) and a wavelength multiplexing section 311. Regarding claims 7 and 9, the light signal supervising section 8 detects and supervises management information placed in an overhead section of a predetermined frame format (see paragraph [0033]). Regarding claims 8 and 10, it is noted that the light path control section sets a path for having light signals to be supervised, which were inputted from an input port, outputted from two ports. The associated method claims 15 and 17-24 are also disclosed.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2, 5, 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asahi in view of Stephens (U.S. Patent 6,538,783). Asahi, discussed above, does not specifically disclose a light amplifying section upstream from the supervising section for amplifying light signals outputted from either of the two ports. Stephens discloses an amplifier 19 upstream from a receiver 16. Stephens teaches that an amplifier can be disposed along optical path 18 to overcome attenuation caused by the optical path or devices installed along the path. One of ordinary skill in the art would have found it obvious to incorporate a light amplifying section

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along the path between the switch 309 and the supervising section 319 to compensate for any signal degradation or attenuation resulting from the optical transmission path through the switch 309. One of ordinary skill in the art would have been motivated to incorporate the light amplifying section 18 to provide an input signal at an appropriate gain level for the supervising section 319. The method of claim 16 would have been obvious for at least the same reasons.

12. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asahi in view of Doerr (U.S. Patent 6,266,460). Asahi, discussed above, does not disclose a bi-directional communication device comprising first and second light circulators, n upward light signal input and output terminals, n downward light signal input and output terminals, and a second light signal supervising section. Bi-directional communication is well known and common in the art. Bi-directional communication allows optical signals to be transmitted to and from various devices, nodes and stations without requiring a large number of components. Additionally, Doerr discloses circulators for bi-directional input/output coupling to a device (column 2 lines 60-63), wherein each port is provided with a circulator. Each circulator comprises an upward input/output and a downward input/output. One of ordinary skill in the art would have found it obvious to utilize the circulators of Doerr to provide bi-directional input/output coupling to each port of the device of Asahi et al. to enable bi-directional transmission via a device requiring relatively few components. Furthermore, although a second supervising section is not specifically disclosed, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide monitoring and surveillance, for the communication signals being transmitted in the direction of the first ports of

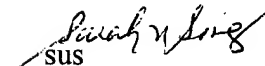
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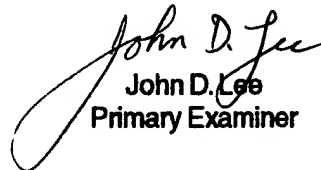
switch 309, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,532,089 is an equivalent of JP 2000-069510, which was provided by the applicant.

14. Any inquiry concerning the merits of this communication should be directed to Examiner Sarah Song at telephone number 703-306-5799. Any inquiry of a general or clerical nature, or relating to the status of this application or proceeding should be directed to the receptionist at telephone number 703-308-0956 or to the technical support staff supervisor at telephone number 703-308-3072.


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April 10, 2003


John D. Lee
Primary Examiner